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REMARKS ON THE STATISTICS OF AMPUTATION.

By Paul F. Eve, M.D., Professor of Surgery in the Medical College of Georgia.

In the 3d Vol. of the first Series of this Journal, published in 1839, will be found the following remarks on the mortality after amputation, which I sent home while in Paris during that year:—"M. Velpeau, in preparing the second edition of his *Medicine Operatoire*, wrote to Dr. Mott, requesting him to give some idea of the success of American surgeons. This Dr. Mott soon furnished, but M. Velpeau, I learn from his chief interne, M. Perischaud, does not give credit to it. He says this is contradicted by the statistics of Dr. Norris, one of the surgeons of the Pennsylvania Hospital. I recollect being impressed with the great error which Dr. Norris's statement was calculated to produce, by those who take it as the basis of success of amputations in the United States. It no more conveys a correct history of American surgery on this, than it does on any other subject. No surgeon of our country will consent to its being a correct foundation of statistics in surgical practice. All it can pretend to, and all that Dr. Norris undoubtedly intended by it, was the practice of the Pennsylvania Hospital, and nothing more. I respect the surgeons of this charitable institution, but I am sure they will acknowledge that they erred, and that greatly, though on the side of mercy, in *delaying amputations during the period referred to by Dr. Norris*. Who, in reading these statistics, will admit them as correct as applied to the United States? And being the only ones yet published in our country, it is not astonishing that a man of M. Velpeau's industry and penetration should have noticed the contradiction to it in Dr. Mott's letter to him."

Soon after my return from Europe, I noticed in the *Medical Examiner*, of Philadelphia, then edited by Drs. Biddle, Clymer and Gerhard, some comments on the above quotation, which was re-published in their Journal. They commence by saying, "We regret we differ in many respects from the writer," but admit that patients in the Pennsylvania Hospital are liable to erysipelas and purulent absorption, and also to the unfavorable circumstance of "*the late period at which surgeons perform some of the amputations*." Again, in this same Journal, May, 1840, they observe, "many of us were under the impression that these operations were extremely insignificant, so far as the mortality was concerned,

One of the editors of the Examiner labored under this impression, and stated his convictions to some of his surgical friends in Paris; after his return to America, he found that the amputations at the Pennsylvania Hospital were often fatal; that is, during a portion of the period alluded to, by Dr. Norris, as that of the greatest mortality after amputations, 1834-6."

As I have made no attack upon the correctness of the report of Dr. Norris, but simply stated my belief that it ought not to be taken as a just statistical basis for calculating success of amputations in the United States, no reply was deemed necessary to the comments made upon my letter. Indeed, after the explanations given by the editors of the Examiner and quoted above, it is difficult to determine wherein we differ on this subject; and I have now merely referred to the matter, because by a recent report of Dr. Betton, of Germantown, published in one of the last Nos. of this very Journal (the Medical Examiner), and by my own statistics of amputation, the position I have assumed is abundantly strengthened.

No one will pretend to deny that the mortality after amputation is far greater than it was supposed to be, previous to recent statistical investigations, or that this is not true, even of our own country; but what I maintain is that Dr. Norris's report of this operation as it occurred in the Pennsylvania Hospital from Jan. 1830 to Jan. 1838, is not a correct basis of the success of American surgeons. This report, it will be recollected, was published in 1838, in the August No. of the American Journal of the Medical Sciences; it was of course to it, and to it alone, that my letter written from Paris in 1839 alluded, and to it also M. Velpeau had reference, when he said it contradicted the assertions made to him by Dr. Mott. During these seven years (from 1830 to 1838), of 56 amputations performed in the Pennsylvania Hospital, 21 died—or nearly one half of those operated upon. Who, I ask, is ready to admit that this is our mortality after this operation? Who will attempt to prove this to be a correct estimate of deaths after amputation in the United States?

Fortunately for me, Dr. Norris, two years subsequently, published another statistical account of these operations as performed in the same institution (Pennsylvania Hospital), during 1838 and 1839. In this second report, we learn that of 24 amputations, *only one died*. What a remarkable discrepancy, and how opposite to the first statement! By one table we are made to lose one in about every two that we amputate, and by the last only one in twenty-four. Was I not then justified in saying the impression produced by the first report was erroneous? Was I not right in supporting the assertion of Dr. Mott, that in America our amputations are generally successful? Would M. Velpeau, had he seen this second report of Dr. Norris, have stated to his hospital surgeon, I cannot credit Dr. Mott on this subject, though he is sustained "by Drs. Gibson, Warren, Paul Eve, and some physicians of Philadelphia."

Dr. Mott stated to M. Velpeau, "Our amputations at New York are

Dr. Gibson also wrote to the same author, "the greater number of amputations that I have performed for diseases of the articulations, wounds from fire-arms, and complicated fractures, have been followed by complete success."

Dr. Thomas F. Betton, of Germantown, has just published his cases of amputation, amounting to 16, with the loss of only 1.

Dr. Norris himself admits the error of too great delay in performing the operation in the Pennsylvania Hospital; and by the statistical report of Dr. George Hayward, of the Massachusetts General Hospital, at the same period, we find the mortality was less than in the first-named institution. While these reports show the proportion of deaths up to 1840, to be after amputations about 1 in 4, yet in private practice it must be considerably less.

Life will always be endangered in an operation like that of amputation, but full and correct statistics, could they be arrived at, would no doubt exhibit the success of the operation in the United States as good, if not better, than in any other country. By a glance at the following tables, a comparison may be made.

The 1st, represents the mortality after amputation in general.

The 2d, that of the inferior extremity.

And the 3d, statistics of my own operations.

There is nothing peculiar in my mode of performing amputation. The triple circular operation is preferred for the thigh and arm, the single flap for the leg, and the double flap for the fore-arm. Animal ligatures (made of deer's tendons) are used, and adhesive plaster, oiled compress, or the compress wetted with cold water, and the roller bandage. Much importance is placed upon the proper application of the latter means, as a preventive to both hemorrhage and inflammation. With a bandage to a stump, secondary bleeding is never apprehended. Opiates, when pain continues, are administered.

No selection has been made in my cases, no operation performed without previous consultation, none declined when one was decided upon, and these are all I have operated upon.

TABLE I.—STATISTICS OF AMPUTATION IN GENERAL.

<i>When occurring or by whom Reported.</i>	<i>No. of Cases.</i>	<i>Deaths.</i>
Faure, after the battle of Fontenoy	300	260 to 270
Edinburgh Royal Infirmary	69	19
Dr. Guyon, French African Army, 1837,	63	17
At siege of Constantine, Africa, 1837,	10	9
At Bildah, Africa,	62	39
Guthrie, Toulouse and New Orleans,	150	42
Dr. Norris, Pennsylvania Hospital, 1838,	56	21
Do. do. do. 1840,	24	1
Dr. Hayward, Massachusetts General Hospital, 1840,	70	15
Mr. Benjamin Phillips, in all countries,	640	150
Do. do. in Great Britain,	308	76
Do. do. private cases in London,	107	28
Guthrie, on the field of battle,	291	24
Do. secondary in hospitals,	551	285
Glasgow Infirmary, Dr. Lawrie,	276	101
Northern Hospital, Liverpool,	96	18
Gendrin, Paris,	79	33
University College Hospital, London,	66	10
Emery, after battle of Navarino,	68	14
Dupuytren,	59	15
Do. by Meniere at Hotel Dieu,	24	17
Scotch Hospitals out of Edinburgh, 1844,	60	14
Larrey and Roux,	38	15
Roux in 1814,	22	8
Dubois,	28	3
Dr. J. C. Warren, Boston, (private,)	18	1
Do. do. hospital,	40	10
Dr. N. R. Smith, Baltimore,	50	5
Dr. Betton, Germantown,	16	1
Malgaigne, Paris, 5 years, ending 1841,	852	332
Paul F. Eve, Augusta,	51	none.

TABLE II.—STATISTICS OF AMPUTATIONS OF THE INFERIOR EXTREMITY.

<i>Where occurring or by whom Reported.</i>	<i>No. of Cases.</i>		<i>Deaths.</i>	
	<i>Thigh.</i>	<i>Leg.</i>	<i>Thigh.</i>	<i>Leg.</i>
Markham, reporter—Dupuytren,		26		21
Alex. King, reporter—Guthrie, Toulouse,	78*		27*	
Alcock, Spain and Portugal,	42*		14*	
John Phillips Potter, 1841,	22	26	4	4
Dr. F. N. Machardy, 1841, London,	202	56	55	11
Dr. Bullen,	19	32	6	3
Dr. Lawrie, Glasgow,	36	27	19	9
Dr. A. Trowbridge, State of New York,	85		11	
Dr. Lawrie, by Thos. Inman,	128	62	46	30
Thos. Inman, France,	107*		60*	
Dr. Norris, Pennsylvania Hospital, 1838,	13	16	6	9
Do. do. do. 1840,	15*		1*	
Dr. Hayward, Mass. Gen. Hospital, 1840,	34	23	9	5
Edinburgh, 1844,	18	20	13	2
Velpau, 1842,	6	4	4	2
In Paris, during 5 years, 1841,	201	192	126	106
Dupuytren, by Meniere, at Hotel Dieu,	11	3	9	3
Dr. Betton, Germantown, 1846,	4	6	1	none.
Paul F. Eve, Augusta,	7	7	none.	none.



**TABLE III.—STATISTICS OF AMPUTATION OF THE INFERIOR EXTREMITY  
OCCURRING IN THE PRACTICE OF THE WRITER.**

**THE LEG.**

No.	Name.	Age.	Sex.	Cause of the Operation.	Result.
1	Soldier	40	Male.	Caries from ball thro' ankle-joint.	Speedy recovery.
2&3	Len	14	Male.	Gangrene fm. frost-bite.	Both legs at same time—rode out on the eighth day.
4	Moses	30	Male.	Aneurism fm. injury	Speedy recovery.
5	Simon	35	Male.	Caries from injury.	Well in 3 weeks.
6	Daniel	27	Male.	Necrosis of Tibia from a burn.	Healed slowly, but entirely.
7*	Ned	22	Male.	Hypertrophy, &c.	Healed in about three weeks.

**THE THIGH.**

1	Sukey	35	Female	Scrofulous ulceration of leg.	Well in 5 weeks, & lived for 3 years.
2	Turknett's boy	15	Male.	Gangrene of leg from injury.	Well in a month.
3	Jonakin's man	35	Male.	Gangrene fm. injury.	Well in four or five weeks.
4	Bill	10	Male.	Necrosis of Tibia.	Well in 3 weeks.
5	C. B.	21	Male.	Gangrene fm. injury to knee-joint.	Well in 3 weeks.
1	William	28	Male.	Do. do. do.	Well in 4 weeks.
7	Lewis	21	Male.	Malignant ulcerations from an old cicatrix of a burn.	Healed in 3 weeks, but disease subsequently attacked the glandular system, and destroyed the patient, the stump remaining sound for two mos.

Total, 14 cases of successful amputation of the inferior extremities.

*Southern Medical and Surgical Journal.*

**A CASE OF SPONTANEOUS DRY GANGRENE—DEATH RESULTING FROM TRUE OR SIMULATED HYDROPHOBIA.**

By R. HILL, M.D., of Delaware, O.

**BELIEVING** the following case rare and remarkable as a whole, and of more than common interest in many of its particulars, I am induced to ask your attention to it; more especially as in its termination a question

<sup>a</sup> Probably only those who died immediately after the operation.

<sup>b</sup> This includes all kinds of amputations, and the same remark applies to my own.

The figures thus marked \* in Table II. indicate simply the inferior extremity, without the distinction into thigh and leg.

\* This was partial of the foot, including the metatarsal of the great toe.

is involved, of doubtful solution, at least, in the minds of some to whom a knowledge of the case has been presented.

The patient was Mrs. Latimer, of the town of Delaware, aged 41, and the mother of five or six children. She was taken on the morning of Sunday, March 16th, of the last year, with chills, pain in the head, back, limbs, &c., with some uneasiness in the chest, and slight cough. I first saw her in the evening of that day, and she was partially relieved by the action of calomel and oil, followed with the Dov. powder.

During the succeeding three days, her fever was moderate; the chills had passed off, and the pains in the head, back, limbs, &c., had become lighter under the use of Dov. powder, spts. nitre, sinapisms, aperients of oil, &c., but the cough had increased, as well as dyspnoea and pain in the right side of the chest. The sputa had become bloody, and the bowels were affected with a bilious diarrhoea. I now—March 19th—bled her to approaching syncope (16 oz.), which, with sinapisms to the right side, partially relieved her. Moderate doses of calomel, Dov. powder, and sulph. morphia, relieved the diarrhoea, and procured rest.

On March 20th, I found the cough, dyspnoea, pain and bloody sputa all increased, for which I again bled her to sixteen ounces, which relieved her far more perfectly than the bleeding of the day previous.

On the morning of the next day (March 21st) I found the same symptoms greatly increased, having become so during the last four or five hours, for which I again bled her 14 ounces, with entire relief resulting. I blistered the right side, however, continued the use of mucilages, and put her upon the use of Dover's powder and tartarized antimony, with Cox's hive syrup.

March 22d.—She continued comfortable, though the diarrhoea had returned. I discontinued the tartarized antimony, and substituted one grain of acetate of lead with the Dover's powder.

23d.—She was still comfortable, the diarrhoea having ceased, and the sputa having ceased to be bloody. I stopped the opiate and lead, continuing only the hive syrup with mucilages.

24th, 2, P. M.—The cough, pain and dyspnoea had again returned, but a bleeding of 12 ounces again relieved her. From this time to the night of the 29th she was convalescent—her cough, pain, &c., having almost entirely ceased, her appetite and strength returning, she being able to sit up from one to two hours at a time, two or three times a-day.

This night (March 29th), the family having all retired, and the room having become cold, she arose two or three times to attend to a sick daughter, and on the last occasion of rising, she got into bed with a severe chill, which lasted an hour, and which was followed with fever of four or five hours' duration, terminating in a free perspiration. She then remained comfortable during the remainder of the 30th, and until 2 o'clock, P. M., of the 31st, when she had another paroxysm. The first chill having taken place at 3, A. M., of the 30th, it gives thirty-five hours as the interval. The second paroxysm terminated as the first, in perspiration, &c., but the intermission being or commencing in the night, I adopted no medication until morning. At 6, A. M., of April 1st, I

gave her three pills composed of blue mass, calomel and rhubarb; but at 8 o'clock, A. M., before any cathartic action, she had another slight chill, the interval having been only eighteen hours. The fever was slight, but continued all day, the cathartic acting moderately in the mean time. At 8, P. M., I found the fever still continued, though she was comfortable and sitting up at the time of my call. I directed quinine whenever the intermission became perfect, which, however, did not occur.

I have been thus particular, endeavoring at the same time to be brief, not from any interest which the case, thus far, possesses, but from the bearing which the condition or treatment may have, in the minds of some, upon that which I have yet to relate.

This night, at midnight, or half past 12, I was called in haste to my patient. At half past 11 o'clock, an hour previous, after sleeping, and her fever not yet having entirely subsided, she was suddenly attacked with severe, excruciating pain in both feet. In a few moments, however, it left the left foot, and settled in the right, rapidly extending to the calf of the leg and up the thigh to the hip. This extension had already taken place when I saw her. She was sitting up, and in such agony of distress throughout her limb, that she thought she could not lie down. There were both numbness and coldness accompanying the pain, and there was slight general chilliness. Her limb had a pale, cadaverous appearance, especially below the knee, and was somewhat shrunken in its volume. I gave her immediately half a grain of the sulph. morph., had her feet immersed in *hot* water, and frictions with stimulating embrocations used, &c. In twenty minutes her feet were removed from the bath, and she was placed in bed, to which she walked with some assistance. There being no relief, another half grain of sulph. morph. was given in thirty minutes from the first. This was attended with partial benefit: but it was repeated in forty-five minutes more, and by 2 o'clock I left her comparatively comfortable, the pain having been broken up into paroxysms of decreasing severity, and with increasing intervals, in which she slept. Hot or warm applications had, in the mean time, been applied, and were still continued to the limb—the principal application being flannel cloths dipped in an infusion of hops.

In the morning I called in the assistance of my friend Dr. Gerhard, who attended the case with me from this time to its termination. At 8, A. M., we found her comparatively easy, though there was some distress in the limb, and on a particular examination of it, we found paralysis of the nerves of motion in the lower part of the extremity, with a benumbed feeling in it, and an icy coldness upon the withdrawal of artificial heat. The limb was at least not swollen, if not shrunken. The general appearance of it was a corpse-like paleness, but on the upper surface of the foot, on the front and outer surface of the leg, and on the front of the thigh, as high as to the middle of it, were spots or patches of a deep purple color, some of them isolated, others running together, the color not disappearing upon the pressure of the finger.

In view of the intermittent character her case had recently assumed, and fearing another paroxysm of pain, &c., we gave her five grain doses

of the sulphate of quinine hourly, until she had taken thirty grains. As she was constantly, however, suffering with more or less pain in the limb, we gave her also a fourth of a grain of sulph. morph. once in six or eight hours. Our topical applications were a sinapism encasing the whole foot, which was not felt by her, an epispastic around the ankle, which had no effect; frictions with stimulating embrocations to the thigh, and an epispastic to the lower part of the spine, which drew well. During the day, under this treatment, the unnatural appearances, purple patches included, together with the numbness, left the thigh and three or four inches of the upper portion of the leg, remaining unchanged below. No intermittent paroxysm appeared in any shape, nor did it again in the future course of the case.

On April 3d, the next day, the condition of the limb was but little changed, the numbness, coldness and paralysis of the lower part of the leg still remaining, and the purple spotted appearance spreading so that it covered more than half the surface of the lower two-thirds of the leg, and a part of the surface of the foot. The cuticle had separated almost entirely over this portion of the leg and foot, not confined, however, to the purpled portions. There was slight tumefaction of the upper surface of the foot and lower portion of the leg. I should have stated that on the day previous, there was observed on the outer side of the leg, midway between the knee and ankle, a spot two inches in length and one in breadth, of unusual whiteness, and appearing corrugated about its edges. Her pulse was about 110, and rather small and feeble. Her muscular strength had greatly diminished since the attack of pain in the limb. We resumed the quinine in grain doses, and continued it during two or three days in this quantity, once in from one to two or three hours, and a fourth of a grain of sulph. morph. was given two or three times in the twenty-four hours, to subdue the pains she still complained of in the leg and foot. We applied this day, April 3d, a blister to each side of the leg, immediately above the knee, which drew well. On this day, also, a peculiar cadaverous fetor was observed to arise from the limb, and small collections of serum and gas were observed under the cuticle.

On April 4th, the toes and lower third of the foot assumed a *tawny* hue, or brown scorched color, and during the succeeding three or four days this hue increased, and the parts became shrivelled, hard, horny, and semi-transparent. The same changes soon became apparent on the side of the leg spoken of as being white and corrugated. At the same time the remaining portion of the leg became more tumefied, of a greenish black color, and very fetid. In the mean time, we wrapt a blister entirely around the limb above the knee, applied the fermenting, charcoal and linseed poultices, &c., to the knee itself, and the upper part of the leg, and encased the lower portion in charcoal alone, for the purpose, simply, of removing the fetor. She gradually sunk, however, until the 7th of April, when, at noon, her pulse was 150 and very feeble, and by evening it was so indistinct that it could not be counted. It remained so during the night and the whole of the 8th. Her respiration at the same time was irregular, deglutition difficult, and voice almost inarticulate.

Quinine and brandy were freely administered while in this condition, and in the evening of the 8th she revived, and the pulse became distinct, and when first counted was 140. By the morning of the 9th, it was at 120, and she had correspondingly improved in other respects. In this condition she remained until the 14th, six days, the sphacelation slowly proceeding up the limb, at the rate of three or four lines per day, preceded by a band of purple redness, with slight cedema.

On this day (the 14th) the progress of the sphacelation ceased, and a line of demarkation began to form, first indicated by the crimson band changing to a scarlet color. This line passed around the limb a little below the knee-joint, irregularly, about four inches below it, on the inside, and less than that on the other sides. I would here mention that, with other troubles, a slough had formed over the sacrum, from two and a half to three inches in diameter, which gave us great annoyance. This completely separated in a few days.

From the 14th to the 20th, her general condition seemed stationary, but so low and feeble that the question of amputation, if otherwise warranted, could not be entertained for a moment. Her pulse varied from 105 to 125 during this period. The sloughing of the soft parts of the limb was proceeding with perfect regularity.

On the 18th, we cut off the limb immediately below the lowest point of living flesh, for the purpose of getting rid of so great a mass of putrid matter, which was exceedingly annoying to ourselves, the patient, and her friends, with all our care and contrivance in dressing. We first ascertained that there was no deep-seated sensibility, by running a sharp-pointed probe through the limb. It was effected, of course, without pain to herself, and, in fact, without her knowledge, until we were sawing the bones, the noise of which was the first to arrest her attention.

From the 20th to the 27th of April, her condition seemed improving, so that her recovery was deemed altogether probable, and almost certain. The soft parts of the limb had almost entirely separated in the process of sloughing, and healthy granulations were forming. The cavity left over the sacrum by the slough, was filling up and healing over, her pulse had improved, her strength had increased, &c.

On the 27th, an entire change took place as to the general system, the local conditions remaining unchanged, for the worse, at least.

On this day (the 27th), at an early hour of the afternoon, she began to experience difficulty in taking drink. [I might have stated before this, that for about two years she had been laboring under diabetes, of what variety I know not, as she had not been under my care for it; that the secretion during twenty-four hours, amounted to three or four gallons, and that her daily drinks of cold water amounted to nearly or quite as much. These conditions, thirst and secretion, had continued through her whole sickness, except for a few hours at the time of her sinking on the 7th and 8th of April, when they had both almost entirely ceased.] When drink was brought to her this afternoon, as she was about to take it, there was a general nervous disturbance, amounting to a shudder, with twitchings of the muscles of the face, neck and arms, though she would suc-

ceed in taking her drink. These difficulties increased during the afternoon until 7, P. M., when I first became aware of it. The convulsive movements, or *strong clonic spasms* of the muscles of the face, neck, arms and chest, increased by attempts to drink, seemed now to arrive at their acme, and when I came into her presence, the eye-balls were thrown convulsively upwards, the eyes open and staring, the muscles of the face horribly distorted; respiration nearly suspended, having been, immediately preceding, that of a person walking into cold water. This condition lasted about half a minute. At intervals of from one to five or ten seconds, there were short, sharp and strong jerks of various muscles, principally confined to the upper portion of the body, still continuing. In ten or fifteen minutes, on attempting to give her an antispasmodic, she was thrown into the condition described as when I first saw her, which lasted about the same length of time, a half minute. These paroxysms, so to speak, of convulsions, during the next four hours, were as frequent as once in twenty or thirty minutes, the short, sharp jerks continuing in the intervals with greater or less frequency. The paroxysms were sometimes brought on by attempts to drink, by bodily exertions, and sometimes without an apparent immediate cause. From 8 to 10 o'clock she took no drink, all attempts being unsuccessful, though various means were tried. We could not even get ice into her mouth, though there was no *trismus*.

She was frequently complaining of her inability to drink, as her thirst was great. At an early part of the evening, a warm bath was suggested, with which suggestion she seemed pleased, but when it was ready for her use, the mere information that it was ready produced such shuddering and convulsive movements, with dread and reluctance in her mind, that we were compelled to desist. Her head, upon the upper portion of it, was exceedingly hot, for which we kept ice constantly applied in a bladder. For the first few hours, the functions of the brain seemed unaffected, but then the mind became slightly wandering, confused for a few moments, then clear again; but upon the whole, the confusion increasing. In the latter part of the night, there was an abatement of the troubles. She was still convulsed, but could drink with tolerable ease, though with agitation in the effort. Her pulse had during the night been small, irregular and rapid, the extremities cool. In the morning of April 28th some general re-action took place, or the pulse was fuller and the extremities warmer. At 12, M., the convulsive actions again increased, and were frequent and severe until 3 or 4, P. M., when they again diminished, the powers of the system evidently giving way—the delirium having become constant, and the pulse very small and irregular, her muscular strength diminished, &c., and by midnight deglutition was difficult, and her voice became inarticulate. There was constant watchfulness, with delirium, and after lingering until 9, P. M., of the 30th, death relieved her from her varied and greatly protracted suffering, forty-five days from the first invasion of disease.

Since her death, information was given by an aged and intimate female acquaintance of the family, that when Mrs. L. was from 14 to 16 years



of age, from twenty-five to twenty-seven years since, she was bitten by a favorite house-dog of her own, while it was laboring under some species of fits, with which it died, or for which it was killed, she thinks the latter.

Of these facts the immediate family have no recollection, except that they possessed such a dog.

This case, it appears to me, calls up several questions of great interest, among which are the following :—

Was the gangrene spontaneous, or the sequela of the previous disease ?

Was the convulsive condition at the close, true hydrophobia, or traumatic tetanus ? If the former, it is remarkable as to the time that the virus remained inactive ; if the latter, it is equally so as to its simulating hydrophobia.—*Proceedings of the Ohio Med. Convention.*

#### DR. INGALLS'S CASE OF TUMOR.

[Communicated for the Boston Medical and Surgical Journal.]

THE object of my communication, which was published in the Journal of June 24th, was to attract the attention of medical men to the great variety of quackery now prevalent. I alluded to but two forms, one of which (homœopathy) seems to be distinguished for its impudence and absurdity. In offering some reasons for pronouncing it a humbug, reference was made to the communications of Wm. Ingalls, M.D.

The gentleman says I have made a "misstatement," and in the abundance of his generosity he is kind enough to attribute the error to "an allopathic dose of stupidity." I wish to assure him that the sentiments contained in his article in the Journal of July 8th, are duly appreciated, and the importance of their source fully recognized. The allopathic doses of contumely which he has dealt out for me, compel me to doubt his faith in the principles of homœopathy.

It is not my purpose to acknowledge any misstatement in my former communication, and the subject is alluded to now only for the purpose of saying that it does not appear to be his object to "caution surgeons," so much as to sing praises to homœopathy.

He says that "in a tumor which bore a strong resemblance to an osteocele, of a most intractable character," the pain was soon relieved and the tumefaction disappeared, after the use of two globules of plumbum, and then asks if the infinitesimal dose of plumbum produced its resolution ; plainly intimating that it did, and then shouts his praises in behalf of his idol. I leave it for the common sense of every reader of our articles to say whether I have misrepresented his sentiments. My "hebetude" [?] of intellect must be my excuse for my opinion, for I utterly deny any "dishonesty of purpose."

It is doubtless true that the inherent power of the human system to overcome disease (call it by what name you may) is frequently overlooked, and remedies may be given unprofitably ; but in cases when this power overcomes the disease, so entirely unaided as it must be by some



of the homœopathic treatment, I am in favor of giving the credit to the proper source. Let a just discrimination decide in any given case whether it needs any artificial aid, and when it is needed, render it; when it is not needed, the system should not be encumbered with any agent, certainly not any possessed with the potency *claimed* for homœopathic remedies, and let the praise of the cure be awarded to the agent that deserves it. It is said that the wounds made by friends are grievous to bear. How many such wounds are inflicted upon the science of medicine by some of those who were formerly its friends, and may have been "professors of anatomy, surgery," &c., in some of our schools, but are now advocating a system which has been justly characterized by Dr. Johnson as "the most impudent insult on the common sense of men that has ever been offered to it in any age or in any country."

I wish to suggest to your correspondent, Dr. Leonard, that if he wishes to treat homœopathically any more cases of "constipation," he can find very high authority in the practice of Wm. Ingalls, M.D., for the use of "five globules of muriate of soda."

L. WOODRUFF.

*New Britain, Conn., Aug. 11, 1846.*

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#### EXCISION OF THE OMENTUM.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—If the following will be of any use to you, it is at your service.

I was called to a man, aged about 30 years, some years since, who, in a fit of delirium tremens, had prepared a dirk-knife, with which he had made an incision into the abdominal parietes, extending each way from the umbilicus six inches, making in the whole extent one foot. Through this aperture, being in an erect position at the time the accident occurred, the omentum majus protruded. Drawing this out with the left hand, he cut off the protruding portion, which measured one hundred and forty-four square inches.

*Treatment.*—The patient being placed in a recumbent position, the protruding portion was returned into the abdominal cavity, by introducing the four fingers of the right hand; then four stitches taken with a curved needle armed with white silk thread. Over this, strips of adhesive plaster were applied, leaving an aperture at the most dependent part of wound, to admit of the discharge of blood, matter, &c. Applying a compress and circular bandage, I directed him to lie as nearly upon his face as he could well endure, in order to favor the discharge of matter from the wound. At the time I was first called, I gave him two ounces of castor oil, directing the same quantity every third day following, as long as confinement, dressing wound every second or third, as the occasion required. This was the treatment in the main, excepting the precaution of using a pad and bandage upon the part, when first beginning to exercise. Diet—gruel, porridge, roasted apple, &c.

At the end of four weeks the patient was up and well. His strength has appeared in no way affected, at least not lessened, nor his digestion

diminished, increased or altered, for nearly three years since recovery. No umbilical hernia.

JOHN H. GUSHEE, M.D.

*Raynham, Mass., August, 1846.*

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DIVISION OF THE INTERNAL RECTUS MUSCLE OF THE EYE.

*Boston, May 16th, 1842.*

To Henry Wheaton Rivers, M.D.

MY DEAR SIR,—Having observed in the Medical Examiner of the 20th of February, 1841, some remarks highly gratifying and complimentary, by Samuel Y. Atwell, Esq., my friend and quondam student, relative to my having described to him the practicability and plan of dividing the musculus rectus internus of the eye, with the view of remedying the convergent strabismus, it may not be improper to state the reason why I did not, whenever an opportunity offered, put the operation in practice.

Not long after I had demonstrated the feasibility of the operation, I met in some medical work with the remark, that strabismus was the effect of the deviation of the antero-posterior axis of the crystalline lens of one eye from that of the other, or, in other words, that the deviation of the axes of the lenses of both eyes did not correspond.

Such is the influence of authority, and such is the habit of taking things on trust, that I abandoned the idea of putting my theory in practice. That there may be a variation in the axis of the lens of one, or the other, or in both eyes, is at least a plausible supposition; and assuming this to be a fact, we can explain many of the phenomena that attend vision.

It is one of the requisites of perfect vision, that the apices of the pencils or cones of light, should impinge against similar spots in each retina. Whenever, therefore, there is a deviation in the axis of either lens, it is the office of the muscles to bring it to correspond with the direction of that of the sound eye. In this way the diverging pencils of rays proceeding from an object, and going to each eye, must be parallel to each other, or the legs of the triangle must be equi-distant to render vision perfect.\* Accordingly, when the anterior pole of the axis is deflected towards the external canthus, the action of the rectus internus is required, especially when we wish to examine an object with minute attention—to bring the axis into a corresponding direction with that of the sound eye, the effect of which is to roll the eyeball inwards, producing the convergent strabismus. The same mode of reasoning may apply to the divergent strabismus.

The anterior extremity or pole of the lenticular axis may point to any part of the circumference of the pupil, so that, in bringing the pencils of light to bear upon an object of vision, certain muscles are brought into action. When it points downwards, the attollens or superbus being

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\* That any person, who labors under strabismus convergent, or divergent, or lateral, or perpendicular, or oblique, sees double, is by no means in accordance with my experience.

brought into action gives to the countenance an air of pride or haughtiness; when it points upward, the deprimens or humilis when acting imparts an expression of humility or meekness; the muscle which enables us to look into the cup while drinking, is called bibitorius; the one that enables us to express aversion or scorn, is denominated aversus; the functions of these muscles, indicated by their names, may become permanent, by a deviation of the lenticular axes from the perpendicular.

The intermediate gradations between the imperceptible deviations of the axes of the lenses and those of the opposite extreme, are infinite. They give a cast to the countenance expressive of character; and, within the range of certain limits, are not incompatible with beauty.

But, as it is the generally received opinion, that strabismus depends on the shortening of one or more muscles of the bulb of the eye, and as the division of them promises, and, indeed, from the interesting cases you have presented to the public, the operation appears to be attended with success, I must yield the palm to the test of experience.

Yours, respectfully, WILLIAM INGALLS.

#### " TYPHUS FEVER."

To the Editor of the Boston Medical and Surgical Journal.

SIR,—As a reader of your Journal, I hope short articles on the nature and treatment of typhus fever, will continue to appear, from the storehouse of the experienced; believing much practical benefit may be gleaned even from conflicting opinions. That "idiopathic typhus fever" consists in a primary derangement of the nervous system, the result of the introduction of a poison, I believe. Excessive heat, watching or study, long-continued exertion—especially in a standing position—scanty nourishment, and the depressing passions, or any other circumstance that exhausts the nervous influence, opens the way for an infectious effluvia to seize, with a formidable grasp, the nervous system, which, were it not for its exhaustion, might resist the foe unscathed. As the poison seizes with greater or less comparative force, we see thought, volition and sensation interrupted.

As the nervous influence is the moving agent of the whole organization, it is a fair conclusion, that with morbid derangement of the former we shall have derangement of the latter. The nervous influence that keeps in healthy action the extreme capillaries, being in a deranged condition, we necessarily shall have a deranged secretion of the kidneys, with dark, scanty urine; of the skin, causing dryness and heat; of the stomach, causing nausea, thirst, and loss of appetite; of the alimentary canal, causing costiveness or diarrhoea. By these deficient secretions the nervous system is in its turn still more depressed. The treatment, from this synoptical view, is at once presented, when there is no local derangement amounting to congestive inflammation. A mild cathartic, and sometimes an emetic, cannot be otherwise than useful, though their use has been greatly abused. When there is fulness of blood, abstract, so as

to relieve the moving power of unnecessary labor, which might otherwise still further exhaust the already deranged and weakened nervous system. Early bloodletting, too, is a great desideratum in the prevention of congestion. It also enables the lungs to arterialize the blood more perfectly. The nervous system is best sustained by a due supply of well arterialized blood, and to this end the lungs should be kept free from congestion, and the system well supplied with a bland, fluid nourishment. Saline and antimonial sedatives may be used when there is great action of the heart, with decreased action of the capillaries. Avoid all kinds of stimulants; they may arouse the nervous influence for the time, but as typhus fever passes slowly along, they cannot be depended upon only to the injury of the patient, excepting at that nice point which can only be learned at the bed-side, viz., when the skin has grown cold and clammy, the pulse flickering, and the impulse of the heart extremely feeble. You may then give wine, and perhaps "cure your patient by preventing him from dying." As opium checks the secretory action, use it sparingly, unless there are excessive secretions. Calomel increases secretion, and may in small quantities be used advantageously.

I have not written the above for the purpose of instructing, but rather that I may stand corrected wherein I err.

H. M. Hooke.

Hudson, N. H., August, 1846.

## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 26, 1846.

*National Institute—Medical Interrogatories.*—One of the interesting and important subjects under the consideration of the National Institute, at its last session at Washington, was the sanitary condition of the United States. A committee was raised to conduct the inquiry, of which James Wynne, M.D., of Baltimore, was chairman. In order to facilitate the researches of the commission, it would greatly oblige the gentlemen composing it, if the following questions could be answered and forwarded to Washington. The replies should be put in the form the writer would prefer when printed in the report of the committee, and directed to the Representative in Congress from the district from whence it is sent. James Wynne, M.D., of Baltimore; Prof. Thomas, Columbian College, Washington; and Dr. Washington, U. S. Navy, constitute the committee. The late Drs. Sewall and Buck were also of the number.

The following are the medical interrogatories.

- 1st. What is the medical topography of your district, and the influence of its soil and climate over health and disease?
- 2d. What has been the effect of agriculture, the clearing of forests, and the draining of soils, upon the climate and health of the inhabitants?
- 3d. What manufactories or large towns are there in your district, and what is their effect on the health of those exposed to their influence?
- 4th. What evils operate in the towns requiring municipal interference?

Are they deficient in a supply of water, drainage or cleanliness, and how remedied?

5th. In towns, what amount of population, and what provisions for public squares.

6th. What epidemic or endemic diseases have you observed, and to what cause are they to be attributed?

7th. What is the annual number of deaths, births and marriages to each thousand of your population? transmit your bills of mortality, if any.

8th. Are there any remarkable instances of longevity, and what is their age and mode of life?

9th. Are there any retreats peculiarly favorable for invalids affected with pulmonary complaints, or any medicinal springs, and their qualities and effects?

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*Laboring too much.*—People do not have relaxation enough in New England. They too generally have a care-worn expression, from infancy to age; and the fact cannot be denied, that anxiety is a weariness to the flesh. We are all utilitarians in this country, especially in the northern States, hardly affording ourselves opportunity for eating or sleeping in the manner which nature demands—for she can only conduct her chemical operations properly, and re-adjust the deranged vital machinery, while we are quietly slumbering. We recruit ourselves and grow fat during a refreshing nap—but exhaust the system, both physically and mentally, in pursuing to excess the ordinary round of every-day business. "All work and no play makes Jack a dull boy," is a proverb based on a profound knowledge of the laws of our being.

Females, in New England, are worse off than the other sex in the deprivation of out-of-door relaxation, as custom has made it vulgar to breathe the fresh air of heaven, unless it is done in a very lady-like manner. Hence they make feeble mothers—look thin, sallow, lank, and die by thousands, prematurely, of diseases that never would have been developed had there been less education of the mind, and more of the body, in girlhood.

A sad mistake is produced by a too implicit belief in the adage that "time is money," since the first object of pursuit is, in consequence, made to be cash. Those who attempt to rest reasonably from their labors, at proper periods are either afraid of not having enough, or are perpetually reminded that idleness ends in want. So the shuttle flies faster than it ought to go; the farmer cheats himself out of all that is worth having, health, by denying himself and his boys a holiday, because time is money and example is every thing; merchants in cities toil for the immediate benefit of thieves and paupers—paying taxes in proportion to their income—and leave the world unsatisfied, having never found themselves ready to rest and take comfort. We work too much and too long in New England.

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*Extra Army Surgeons.*—In the list of temporary Surgeons to the Volunteer troops, Indiana, Illinois and Kentucky seem to have had the preference over the other States. The New Orleans Jeffersonian complains, and with reason, too, that although thirty Surgeons have been appointed

by the President, there is not one belonging to Louisiana. Dr. Seymour Halsey and Dr. John Thompson, recently commissioned, are from Missouri. It should be recollected that these newly-created staff surgeons are to be dismissed when the army is disbanded. They are not in service for life, like those who gain entrance into the government employment through examinations, promotions, &c. Nor can they stand in the way of those regular gentlemen, or leap over their heads, to get, either by hook or by crook, a permanent income. When the war has ended, all the new surgeons will be permitted to return to their peaceful homes, to resume practice.

**Severe Criticism on Velpeau's Surgery.**—On the fiftieth page of the July No. of the Western Medical Journal, commences one of the most caustic articles that ever appeared in that periodical, on Dr. Townsend's translation of Velpeau's Operative Surgery. It is not the object of the reviewer to undervalue the writings of M. Velpeau, but to exhibit the alleged vanity and weakness of Dr. Townsend in flattering Dr. Mott.

"Medicine is an idle waste of thought,  
And Mott is everything and everything is Mott,"

says the writer, who has mustered all the reserved forces in literature to crush, at the onset, the hopes and expectations of the man in whose opinion, "No name that adorns these annals, either in the battle field or in the councils of government, or in its diplomacy, that has added more sterling reputation and abiding lustre to the intrinsic glory and future fame of America, than that of Valentine Mott, unaided and ungilded though that name may be by the insignia of office or power."

Further specimens of the cutting sarcasm of the author of the paper, or the manner of goading and fretting his game, need not be copied to show how or why the onslaught was made. Without seeing the matter in the same light as the reviewer, or imputing such motives to Dr. Townsend as seem to have been suspected to have called forth this keen rebuke, we hope both parties may live long enough to forget and forgive each other.

**Quackery run Mad.**—Large handbills have been thrown into shops over the city of Boston, bearing the following advertisement:—

"**Mesmerism.**—Dr. M. D. Lunt would respectfully inform the inhabitants of Boston, that he has taken rooms at No. 1 Alden Lane, Court St., where he will attend to the examination of diseased persons, by a female clairvoyant, who will give the diagnosis of disease, by communication with the person, or by a lock of hair from the back of the head; or in fair weather, by *having the distance and point of compass!* Having practised for the last twelve years, he would confidently recommend it to the afflicted, as the surest and safest course to be pursued for restoration to health and happiness."

Was there ever a more barefaced imposition attempted in an age of boasted intelligence? Gross as it is, however, the very improbability of fulfilling a particle of what is promised, will be the means of raising a whole regiment of believers in the tomfoolery of animal magnetism, who will not only visit Alden Lane with locks of hair, but will give the lati-

tude and longitude of the residence of greater asses than themselves. But that is not all—they will pay generously for being imposed upon, and walk away with heartfelt thankfulness that Providence has raised up such a wonderful man as this mesmerizing advertiser, Lunt, to heal their infirmities. This is a fair specimen of the thriving every-day quackery in the city of Boston, the reputed Athens of America!

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*Braithwait's Retrospect, Vol. XIII.* Boston, Jordan & Wiley, 20 State street.—This valuable digest of all new facts and discoveries in Medicine and Surgery, culled from the medical periodicals and literature of the world, is naturally finding favor with the profession. The present volume contains 395 closely-printed 8vo pages. This increase in the size of the London work rendered it necessary to increase the subscription to \$1.50 yearly, which leaves it still one of the cheapest of works.

Messrs. J. & W., who are agents for most of the medical periodicals, are receiving names for a cheap, yet good, re-print of the British and Foreign Medical Review. Those disposed to encourage it can send their names to them. Copies of the London edition are now supplied at \$6.

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*The Mesmerizer's Oration at the Royal College of Physicians.*—An oration was delivered on Saturday, June 27th, by Dr. Elliotson, before an auditory including all the mesmerists in London, and some from the Provinces. The oration contained sketches of Linacre, and his foundation of the College—of Harvey and Jenner, and the persecution which sought to impede their great discoveries. The point from which the orator started, and which colored his discourse throughout, was the language of Harvey himself in his bequest to the College, counselling its members to be assiduous in their inquiries into Nature "by way of experiment," and to live in friendship with each other. At the close of the oration, which contained eulogistic allusions to men distinguished for the practising that precept, such as Gilbert, Thomas Brown, and others, Dr. Elliotson brought its application nearer home, by a bold avowal of opinions and beliefs to which he has lately committed himself. The style of delivery was not always very audible or correct, and the applause when Dr. Elliotson had ceased, was chiefly among the mesmerists by profession. The Lord Chief Baron, Mr. Justice Maule, the Bishop of Oxford, the Dean of Westminster, the Vice Chancellor, the Master of the Rolls, Sir R. H. Inglis, &c., were among the audience. Among the members of the profession were Drs. Bright, Watson, Latham, Forbes and Addison. Sir James Clark and Dr. Chambers were not present.—*London Lancet.*

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*Cholera at Ahmedabad.*—The Bombay Times of May 16th, states, that by letters of the 11th inst. from Ahmedabad, accounts have been received at that station from Major Hale, dated at Kunnas, about ninety-five miles from Mhow, stating that they had had 310 cases of cholera in the 22nd Native Infantry, of which 152 had proved fatal! The surgeon, Dr. Arnott, had been attacked with the disease, and was, at the date of the last letter, the 6th, in a very precarious state, his native assistant being in a worse condition than himself. At Ahmedabad, the 8th Native Infantry



lost, on the night of the 10th, one native officer and four sepoy; the 26th, one sepoy, and the Cooly corps continued to lose men from the same disease. The want of medical men at Baroda is loudly complained of.

**A Family Poisoned by a Glazed Dish.**—On Saturday, the 6th of June, the mother of a family of three children, in Berwick, bought a large earthen dish, which she immediately put to use by sending it to the bakehouse with a quantity of fish. After the meal had been prepared, the entire family (consisting of the mother, two sons and a daughter) partook of it, and shortly afterwards they became seriously ill, exhibiting signs of being poisoned. A surgeon being sent for, and proper antidotes applied, they are now recovering. The cause is supposed to have consisted in the material used for coating the ware not being properly mixed, and too great a quantity of white lead being used.—*Glasgow Courier*.

**Medical Miscellany.**—Dr. Samuel Kennedy, recently tried at New Orleans for the murder of Mr. Wait, in 1844, was acquitted.—A fatal disease exists among the horses near Cambridge, Md.—From Havana word comes that there is a great amount of sickness in the American squadron. There is also much sickness in the army on the borders of Mexico.—Dr. John La Conte, of Savannah, has received the appointment of Professor of Natural Philosophy and Chemistry in the University of Georgia.—Cholera, of a domestic origin, is quite prevalent in England, attributable to atmospheric influences.—Indications of the Asiatic cholera have appeared in Spain, which has induced the profession to issue a circular to the people, advising them how to conduct themselves in regard to diet.—Dr. Jones, of Pike, Georgia, is a candidate for Congress.—Drs. Daniel M'Phail, of Tenn.; George Penn and Geo. Johnson, of Missouri, and A. Parker, of Texas, have been appointed Surgeons in the U. S. Army; and Drs. Wm. D. Dorris, of Tenn., Thos. M. Morton and Richard H. Stevens, of Missouri, E. Tucker and Richard P. Ashe, of Texas, Assistant Surgeons.—The weekly report of deaths in Boston last week shows a remarkable state of good health among the adult population, but a mortality among infants unusual even for this season of the year—71 out of the 88 deaths being of children under 5 years!

**ERRATUM.**—In the Journal of August 5th, page 15, line 9, the Recipe should read—Hydriod. potass., 3iij.; cerat. simplex, 3j. M.

**MARRIED.**—Dr. J. F. Head, U. S. A., Boston, to Miss K. Apthorp, of N. H.—At Andover, Mass., Walter Kimball, M.D., to Miss M. Gage.—At Bangor, Me., George Augustus Shurtleff, M.D., of Wareham, Mass., to Miss M. Jane Nye.—At Leominster, Dr. James M. Whittemore, of Brighton, to Miss Catharine H. Carter, of Lancaster.

**DIED.**—At Nauvoo, Illinois, the Mormon city, Dr. Wm. C. Matlack, editor of the Eagle. At Springfield, Mass., Dr. James Swan, 52.—At Paris, Dr. Suberville, 64—remembered as a prominent person in storming the Bastille.

**Report of Deaths in Boston**—for the week ending Aug. 29d, 48.—Males, 55, females, 53.—Stillborn, 5. Of consumption, 1—disease of the bowels, 37—cholera infantum, 11—diarrhea, 2—convulsions, 1—dropsy on the brain, 2—infantile, 9—typhus fever, 2—measles, 3—croup, 1—child-bed, 2—paralysis, 1—marasmus, 3—cholera morbus, 2—dropsy, 1—sudden, 3—lung fever, 1—teething, 1—inflammation of the lungs, 1—scarlet fever, 2—chickenpox, 1—dysentery, 1.

Under 5 years, 71—between 5 and 20 years, 4—between 20 and 40 years, 7—between 40 and 60 years, 4—over 60 years, 2.

**Vaccine Institution.**—The national vaccine board, in their report to Sir James Graham, printed June 16th, announce a considerable diminution in the prevalence of smallpox during the past year, and a further confirmation of the conviction which they have repeatedly expressed of the protective influence of vaccination, whenever the operation has been duly performed, and the progression of the vesicle carefully watched and guarded during its advancement and decline. "It is true," the board add, "that we have from time to time received complaints with respect to the failure of vaccine lymph; but we have investigated such cases, and feel justified in stating, as the results of our inquiry, that the imputed failures have not been due to any imperfection in the lymph itself, inasmuch as lymph taken from the very same source, and under the very same circumstances as that which had been condemned as inoperative, has proved completely effective in numerous other cases; but that the failures in question are to be referred to the operation of circumstances which are unfortunately wholly independent of the control of the vaccine board. We regard as erroneous the belief that the vaccine virus undergoes deterioration by being kept; in proof of which we are prepared to establish, by unquestionable documents, the striking fact, that lymph which had been conveyed to and from India has retained its protective properties wholly unimpaired after a lapse of twenty years. We have to announce the receipt of statements from New Zealand of the unqualified success of lymph supplied by our board, especially among the native population of that island."—*London Lancet*.

#### MASSACHUSETTS MEDICAL COLLEGE.

THE Medical School of Boston is about to re-commence its annual course of instruction, under advantages greatly exceeding those which it has been able to offer in any former period of its history.

A new and elegant Medical College, of ample dimensions, is now in the process of erection, and will be completed in season for the coming course of lectures. It is situated in Grove Street, on the land, liberally given by Dr. GEORGE PARKMAN, near the Hospital, in a quarter of the city highly convenient for the lodgings of students. Its museum and collections for illustrating the different courses, is most ample, and in some respects unequalled in this country.

The Massachusetts General Hospital has been enlarged by the addition of two spacious wings, which render it capable of containing more than double its former number of patients. And the increase of its permanent funds, from the numerous and large donations of the last few years, will enable the trustees to meet the expense attending their support.

The Lectures will begin at the new Medical College on the first Wednesday in November, and continue four months, as follows:

On Anatomy and Surgery,	by JOHN C. WARREN, M.D.
On Chemistry,	JOHN W. WEBSTER, M.D.
On Clinical Medicine and Materia Medica,	JACOB BIGELOW, M.D.
On Principles of Surgery and Clinical Surgery,	GEORGE HAYWARD, M.D.
On Obstetrics and Medical Jurisprudence,	WALTER CHANNING, M.D.
On Theory and Practice of Medicine,	JOHN WARE, M.D.

The students attend any or all the courses as they see fit. The collective fee for all the courses is \$75. The fee for matriculation is \$3, payable only by those who attend for the first time in this institution. The graduation fee is \$20. The ticket for the dissecting room is \$5. Admittance to the Hospital and the use of the Library are gratuitous.

Board is as low as in any of the Atlantic cities.

Practical anatomy is now amply provided for by law of this Commonwealth.

The vast increase which has lately taken place in the population of Boston, the numerous avenues and extensive commercial relations, by which it is now connected with all parts of the country, its extensive and unrivalled public charities, its Hospital, its Dispensary, its Eye and Ear Infirmary, its House of Industry, the Marine Hospital at Chelsea, the scientific collections of mineralogy and of pathological and comparative Anatomy, as well as the proximity of Harvard University, of which the Boston Medical School is a department—are circumstances which point to this city as a most convenient and profitable residence for the medical student, while the thorough and complete course of instruction given at the College and Hospital is believed have distinguished the graduates of this University among those of the United States.

July 4.

July 15—Nov 3

W. CHANNING, Deem.

#### CHARITABLE INFIRMARY.

THE Subscribers will attend to diseases of the poor, and where necessary, perform surgical operations gratuitously, at No. 1 Carver street, between 11 and 12 o'clock, on Mondays and Thursdays.

WINSLOW LEWIS, Jr. M.D.  
S. CABOT, Jr. M.D.

March 18.—epdm